

APRIL/MAY 2023

**CEBT64B — PHARMACEUTICAL  
BIOTECHNOLOGY**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define a drug.
2. Outline the routes of drug administration.
3. List the anticancer drugs.
4. Explain the term monoclonal antibody.
5. Define immobilization.
6. Summarize the role of hyaluronidase
7. What is meant by microencapsulation?
8. Outline the types of capsule.
9. What is IAEC?
10. Explain the principles of bioassay.



SECTION B — ( $5 \times 5 = 25$  marks)

Answer ALL questions.

11. (a) Identify the principle of pharmacology.

Or

- (b) Analyze how drugs are absorbed in the body.

12. (a) Organize the drugs used to treat viral infection.

Or

- (b) Examine the principle behind the production of human insulin.

13. (a) Identify the factors affecting enzyme kinetics.

Or

- (b) Analyze the immobilization method for plant cells.

14. (a) Identify the types of microcapsules.

Or

- (b) Examine the advantages of capsule dosage form.

15. (a) Identify the basic principle of bioassays.

Or

- (b) Examine the clinical models used for screening of new drugs.

SECTION C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

16. Explain the phase I metabolism of drugs.

17. Deduce the methodology involved in monoclonal antibody production.

18. Explain various immobilization technique

19. Elaborate on the importance of microencapsulation.

20. Discuss the maintenance and regulations of laboratory animals.